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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,227	05/08/2001	George Robert Parrett	81928.0007	4212

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EXAMINER

DUNCAN, MARC M

ART UNIT	PAPER NUMBER
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2113

DATE MAILED: 03/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/852,227

Applicant(s)

PARRETT ET AL.

Examiner

Marc M Duncan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 4 and 12-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

Claims 1-11 and 16-18 are rejected under 35 USC 103(a).

Claims 4 and 12-16 are objected to.

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the citizenship of each inventor.

Claim Objections

Claims 4 and 16 are objected to because of the following informalities: Claim 4 states "a least some of the monitor devices are each housed in a housing and is removably connected to the SAN." The lack of subject-verb agreement makes the claim indefinite. It is unclear as to what is removably connected. Claim 16 states "a plurality of SAN monitor." The examiner believes monitor is meant to be plural and has examined the application as such. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 3, 6, 7, 8, 9, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Donnell et al.

Regarding claim 1:

O'Donnell teaches a plurality of monitor devices each being connected to a network and to a communications network, each monitor device being operable to issue commands to, transmit data to, and/or receive data from the network in Fig. 1, col. 1 lines 24-25 and col. 2 lines 40-52. In the column 1 citation, O'Donnell teaches more than one of the switches and therefore more than one monitor device.

O'Donnell teaches a master connected to the communications network and communicating with the monitor devices in Fig. 1 numeral "13" and col. 1 lines 24-25.

O'Donnell does not explicitly teach the monitor devices being SAN monitors and the network to which they are connected being a SAN.

The examiner takes official notice that a fiber channel fabric, as is present in O'Donnell, was well known and widely used by those of ordinary skill in the art at the time of invention to couple a SAN with a host.

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It would have been obvious to one of ordinary skill in the art at the time of invention to combine the fiber channel teachings of O'Donnell with a SAN.

One of ordinary skill in the art at the time of invention would have been motivated to combine the teachings because fiber channel fabrics were widely utilized for SAN connections because of the speed and bandwidth the fiber channel fabric provides, a necessity for a SAN.

Regarding claim 2:

O'Donnell teaches wherein the monitor devices transmit information gathered from the SAN to the master via the communications network in col. 3 lines 13-14. Monitor information is returned to the requesting host.

Regarding claim 3:

O'Donnell teaches wherein at least some of the monitor devices are programmable, and wherein the master programs the programmable monitor devices by transmitting software instructions to the monitor devices via the communications network in col. 3 lines 4-11.

Regarding claim 6:

O'Donnell teaches an interface for communicating with the network in Fig. 1. The device of O'Donnell is attached to the network and therefore must have an interface to the network.

O'Donnell teaches a programmable logic block connected to the interface and adapted to be connected to a communications network in Fig. 1 and col. 3 lines 4-11.

O'Donnell does not explicitly teach the network to which the monitor device is connected being a SAN.

The examiner takes official notice that a fiber channel fabric, as is present in O'Donnell, was well known and widely used by those of ordinary skill in the art at the time of invention to couple a SAN with a host.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the fiber channel teachings of O'Donnell with a SAN.

One of ordinary skill in the art at the time of invention would have been motivated to combine the teachings because fiber channel fabrics were widely utilized for SAN connections because of the speed and bandwidth the fiber channel fabric provides, a necessity for a SAN.

Regarding claim 7:

O'Donnell teaches wherein the programmable logic block is programmed to issue commands to, transmit data to, and/or receive data from the SAN through the SAN interface in col. 2 lines 40-52.

Regarding claim 8:

O'Donnell teaches wherein the programmable logic block is programmed to transmit information gathered from the SAN to the communications network in col. 3 lines 13-14.

Regarding claim 9:

O'Donnell teaches wherein the programmable logic block is programmable by software instruction received via the communications network in col. 3 lines 4-11 – “set monitor command.”

Regarding claim 17:

O'Donnell teaches gathering information about the SAN using a plurality of monitor devices connected to the SAN – see citations and motivation for rejecting claim 1.

O'Donnell teaches communicating the gathered information to a master via a communications network – see citations and motivation for rejecting claims 1 and 2.

O'Donnell teaches processing the communicated information using the master in col. 3 lines 13-15.

Regarding claim 18:

O'Donnell teaches programming the monitor devices by transmitting a software instruction from the master to the monitor devices via the communications network in col. 3 lines 4-11.

Claims 4, 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Donnell as applied to claims 1 and 6 above, and further in view of Cidon et al.

Regarding claim 4:

The teachings of O'Donnell are outlined above.

O'Donnell does not explicitly teach at least some of the monitor devices housed in a housing and removably connected to the SAN. O'Donnell does, however, teach the monitor devices connected to the SAN.

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Cidon teaches at least some of the monitor devices housed in a housing and removably connected to the SAN in col. 10 lines 54-65.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the stand-alone devices of Cidon with the switch-connected monitors of O'Donnell.

One of ordinary skill in the art at the time of invention would have been motivated to combine the teachings because Cidon teaches that for very fast networks, stand-alone devices are preferable for full-scale testing, and the fiber channel fabric of O'Donnell would be an example of a very fast network.

Regarding claim 5:

Cidon teaches wherein at least some of the monitor devices are attachment modules each attached to an existing device on the SAN in col. 10 lines 54-65.

Regarding claim 10:

The combination of O'Donnell and Cidon teaches wherein the SAN interface and the programmable logic block are contained within the housing – see the above citations and motivation with regard to claim 4.

Claims 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Donnell and Cidon as applied to claim 4 above, and further in view of Microsoft Press.

Regarding claim 11:

The combination of O'Donnell and Cidon teaches a monitor attachment module for a storage area network (SAN) – see the above citations and motivation with regard to claims 1 and 4.

O'Donnell teaches the SAN including a plurality of SAN devices to be monitored in Fig. 1, col. 1 lines 24-25 and col. 2 lines 40-52.

O'Donnell teaches a switch having a plurality of ports for connecting to SAN devices in Fig. 1.

The combination of O'Donnell and Cidon the monitor attachment module comprising: a plurality of first ports each adapted to be connected to a port of the switch in Fig. 1. The combination of O'Donnell and Cidon creates a monitor attachment module that would necessarily have to be connected to the F-ports of the switch picture in Fig. 1.

The combination of O'Donnell and Cidon teaches a plurality of second ports each adapted to be connected to a SAN device, each second port being connected to a corresponding first port in Fig. 1. The combination of O'Donnell and Cidon creates a monitor attachment module that would necessarily be connected to the SAN device picture in Fig. 1 and which would also necessarily be connected to the first ports, which are connected to the switch, in order to pass instructions through to the SAN devices.

The combination of O'Donnell and Cidon teaches at least one SAN monitor adapted to be connected to a communications network in Fig. 1 – Management Director.

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The combination of O'Donnell does not explicitly teach at least one multiplexer, each multiplexer being connected to a corresponding monitor for selectively connecting the monitor to one or more second ports.

Microsoft Press teaches a multiplexer, which is defined as a device for selectively connecting differing numbers of communication lines to differing numbers of communication ports in the definition of a multiplexer.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the multiplexer of Microsoft Press with the monitor of O'Donnell.

One of ordinary skill in the art at the time of invention would have been motivated to combine the teachings because a multiplexer is used to selectively couple a device to a number of communication ports, a need that is expressed by O'Donnell in col. 3 lines 7-11. The monitor commands specify which ports are to be monitored. Thus, O'Donnell expresses a need for a way to selectively connect the monitor to said specified ports. The multiplexer supplies a solution to this need.

Regarding claim 16:

The combination of O'Donnell, Cidon and Microsoft Press teaches a plurality of SAN monitors and a plurality of multiplexers each corresponding to a monitor for selectively connecting the monitor to one or more second ports in O'Donnell, col. 1 lines 24-25. The cited line teaches a fabric including more than one switch, which would inherently include a monitor and multiplexer for each switch.

Allowable Subject Matter

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Claims 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art was not found that explicitly teaches or fairly suggests the scan control device as outlined in claim 12.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art not relied upon contains elements of the instant claims and/or represents a current state of the art.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc M Duncan whose telephone number is 703-305-4622. The examiner can normally be reached on M-T and TH-F 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 703-305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md


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